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N.P. Magtoto and H.H. Richardson, In situ infrared reflection–absorption spectroscopic characterization of sustained kinetic oscillations in the Pt(100)/NO + CO system 417 (1998) 189

M.A. van Daelen, M. Neurock and R.A. van Santen, Reactivity of diatomic molecules on Cu(100) 417 (1998) 247
A.R. Atwell and J.-K. Zuo, Characterization of Cu-reacted sites for Cu/Si(111)-(7 × 7) 417 (1998) 261

Epitaxy

V.M. Bermudez, Study of the growth of thin Mg films on wurtzite GaN surfaces 417 (1998) 30
K. Mašek, R. Kapsa and V. Matolín, Preparation of single-crystalline Nb–Al_2O_3–Nb structures by molecular-beam deposition 417 (1998) 139
C. Mottet, R. Ferrando, F. Hontinfinde and A.C. Levi, A Monte Carlo simulation of submonolayer homoepitaxial growth on Ag(110) and Cu(110) 417 (1998) 220

Etching

T. Fukuda, Oxygen-induced missing dimer row formation on the Ge(100) surface 417 (1998) L1149

Evaporation and sublimation

D.S. Martin, P. Weightman and J.T. Gauntlett, The evaporation of *n*-hexadecane from highly oriented pyrolytic graphite studied by atomic force microscopy 417 (1998) 390

Faceting

K. Arenhold, S. Surnev, P. Coenen, H.P. Bonzel and P. Wynblatt, Scanning tunneling microscopy of equilibrium crystal shape of Pb particles: test of universality 417 (1998) L1160

Friction

J. Kerssemakers and J.Th.M. De Hosson, Probing the interface potential in stick/slip friction by a lateral force modulation technique 417 (1998) 281

Growth

A.I. Oliva, J.L. Sacedón, E. Anguiano, M. Aguilar, J.A. Aznárez and J.A. Méndez, Evidence of pure diffusion process during growth of gold films 417 (1998) L1139
V.M. Bermudez, Study of the growth of thin Mg films on wurtzite GaN surfaces 417 (1998) 30
E. van Veenendaal, P.J.C.M. van Hoof, J. van Suchtelen, W.J.P. van Enckevort and P. Bennema, Kinetic roughening of the Kossel (100) surface: comparison of classical criteria with Monte Carlo results 417 (1998) 121
K. Mašek, R. Kapsa and V. Matolín, Preparation of single-crystalline Nb–Al_2O_3–Nb structures by molecular-beam deposition 417 (1998) 139
M.-H. Schaffner, F. Patthey and W.-D. Schneider, Growth study of silver on MgO(100)/Mo(100) 417 (1998) 159
C. Mottet, R. Ferrando, F. Hontinfinde and A.C. Levi, A Monte Carlo simulation of submonolayer homoepitaxial growth on Ag(110) and Cu(110) 417 (1998) 220
K. Nakamura and M. Yata, An interpretation of the temperature-dependent growth mode of copper on the Cu(001)$(2\sqrt{2} \times \sqrt{2})$R45°-O surface 417 (1998) 268

Interface states

V.M. Bermudez, Study of the growth of thin Mg films on wurtzite GaN surfaces 417 (1998) 30

Oxidation

T. Mitrelias, S. Kelling, R.I. Kvon, V.P. Ostanin and D.A. King, Effect of acoustic excitation on the rate of CO oxidation over Pt{110} 417 (1998) 97
B.D. Zion, A.T. Hanbicki and S.J. Sibener, Kinetic energy effects on the oxidation of Ni(111) using O_2 molecular beams 417 (1998) L1154

Photochemistry

A.D. Modestov, J. Gun and O. Lev, Graphite photoelectrochemistry study of glassy carbon, carbon-fiber and carbon-black electrodes in aqueous electrolytes by photocurrent response 417 (1998) 311

Physical adsorption

D.S. Martin, P. Weightman and J.T. Gauntlett, The evaporation of *n*-hexadecane from highly oriented pyrolytic graphite studied by atomic force microscopy 417 (1998) 390

Self-assembly

M. Edelwirth, J. Freund, S.J. Sowerby and W.M. Heckl, Molecular mechanics study of hydrogen bonded self-assembled adenine monolayers on graphite 417 (1998) 201

Sticking

P. Müller, A. Ranguis, M. Ladevèze, F. Arnaud d'Avitaya and G. Tréglia, Thermodesorption mass spectrometry study of the adsorption of Sb on misoriented Si(111) 417 (1998) 107
J. Kerssemakers and J.Th.M. De Hosson, Probing the interface potential in stick/slip friction by a lateral force modulation technique 417 (1998) 281

Surface chemical reaction

M.A. Henderson, S.A. Joyce and J.R. Rustad, Interaction of water with the (1 × 1) and (2 × 1) surfaces of α-Fe_2O_3(012) 417 (1998) 66
M.J. Hei, H.B. Chen, J. Yi, Y.J. Lin, Y.Z. Lin, G. Wei and D.W. Liao, CO_2-reforming of methane on transition metal surfaces 417 (1998) 82
T. Fukuda, Oxygen-induced missing dimer row formation on the Ge(100) surface 417 (1998) L1149
B.D. Zion, A.T. Hanbicki and S.J. Sibener, Kinetic energy effects on the oxidation of Ni(111) using O_2 molecular beams 417 (1998) L1154
R. Konečný and D.J. Doren, Cycloaddition reactions of unsaturated hydrocarbons on the Si(100)-(2 × 1) surface: theoretical predictions 417 (1998) 169

Surface diffusion

A.I. Oliva, J.L. Sacedón, E. Anguiano, M. Aguilar, J.A. Aznárez and J.A. Méndez, Evidence of pure diffusion process during growth of gold films 417 (1998) L1139

K. Nakamura and M. Yata, An interpretation of the temperature-dependent growth mode of copper on the Cu(001)($2\sqrt{2} \times \bar{2}$)R45°-O surface 417 (1998) 268
St. Klumpp and H. Dabringhaus, Experimental study of the adsorption of lithium fluoride on the (111) surface of CaF_2 417 (1998) 323

Surface energy

M.J. Hei, H.B. Chen, J. Yi, Y.J. Lin, Y.Z. Lin, G. Wei and D.W. Liao, CO_2-reforming of methane on transition metal surfaces 417 (1998) 82
I.G. Batirev, W. Hergert, P. Rennert, V.S. Stepanyuk, T. Oguchi, A.A. Katsnelson, J.A. Leiro and K.H. Lee, Surface atomic forces and multilayer relaxation of W(001), W(110) and Fe/W(110) 417 (1998) 151
K. Arenhold, S. Surnev, P. Coenen, H.P. Bonzel and P. Wynblatt, Scanning tunneling microscopy of equilibrium crystal shape of Pb particles: test of universality 417 (1998) L1160

Surface relaxation and reconstruction

S. Narasimhan, Phonon softening and the anomalous thermal expansion of Ag(111) 417 (1998) L1166
K. Nakamura and M. Yata, An interpretation of the temperature-dependent growth mode of copper on the Cu(001)($2\bar{2} \times \sqrt{2}$)R45°-O surface 417 (1998) 268

Surface roughening

E. van Veenendaal, P.J.C.M. van Hoof, J. van Suchtelen, W.J.P. van Enckevort and P. Bennema, Kinetic roughening of the Kossel (100) surface: comparison of classical criteria with Monte Carlo results 417 (1998) 121

Surface segregation

P.T. Wouda, M. Schmid, B.E. Nieuwenhuys and P. Varga, STM study of the (111) and (100) surfaces of PdAg 417 (1998) 292
A.V. Krajnikov, P. Lejček, M. Militzer and J. Adámek, Surface segregation on Fe–Si single crystals: the effect of crystallography 417 (1998) 337

Surface structure, morphology, roughness, and topography

L. Diederich, O.M. Küttel, P. Ruffieux, Th. Pillo, P. Aebi and L. Schlapbach, Photoelectron emission from nitrogen- and boron-doped diamond (100) surfaces 417 (1998) 41
P. Müller, A. Ranguis, M. Ladevèze, F. Arnaud d'Avitaya and G. Tréglia, Thermodesorption mass spectrometry study of the adsorption of Sb on misoriented Si(111) 417 (1998) 107
E. van Veenendaal, P.J.C.M. van Hoof, J. van Suchtelen, W.J.P. van Enckevort and P. Bennema, Kinetic roughening of the Kossel (100) surface: comparison of classical criteria with Monte Carlo results 417 (1998) 121
J. Wider, T. Greber, E. Wetli, T.J. Kreutz, P. Schwaller and J. Osterwalder, Direct observation of subsurface oxygen on Rh(111) 417 (1998) 301
H. Graoui, S. Giorgio and C.R. Henry, Shape variations of Pd particles under oxygen adsorption 417 (1998) 350
C. Schmidthals, D. Sander, A. Enders and J. Kirschner, Structure and morphology of Ni monolayers on W(110) 417 (1998) 361

Surface tension

I.G. Batirev, W. Hergert, P. Rennert, V.S. Stepanyuk, T. Oguchi, A.A. Katsnelson, J.A. Leiro and K.H. Lee, Surface atomic forces and multilayer relaxation of W(001), W(110) and Fe/W(110) 417 (1998) 151

Surface thermodynamics (including phase transitions)

N.P. Magtoto and H.H. Richardson, In situ infrared reflection–absorption spectroscopic characterization of sustained kinetic oscillations in the Pt(100)/NO + CO system 417 (1998) 189
K. Nakamura and M. Yata, An interpretation of the temperature-dependent growth mode of copper on the Cu(001)($2\sqrt{2} \times \sqrt{2}$)R45°-O surface 417 (1998) 268

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Acoustic waves

T. Mitrelias, S. Kelling, R.I. Kvon, V.P. Ostanin and D.A. King, Effect of acoustic excitation on the rate of CO oxidation over Pt{110} 417 (1998) 97
N. Saito, K. Sato and Y. Inoue, Different effects of acoustic resonance oscillation on activation of a thin Pd film catalyst deposited on an oppositely polarized ferroelectric $LiNbO_3$ single crystal 417 (1998) 384

Phonons

S. Narasimhan, Phonon softening and the anomalous thermal expansion of Ag(111) 417 (1998) L1166

Plasmons

H. Jouin, F.A. Guttierez and C. Harel, Energy shifts for a helium atom near aluminum surfaces 417 (1998) 18
M.-H. Schaffner, F. Patthey and W.-D. Schneider, Growth study of silver on MgO(100)/Mo(100) 417 (1998) 159

Thermal desorption

P. Müller, A. Ranguis, M. Ladevèze, F. Arnaud d'Avitaya and G. Tréglia, Thermodesorption mass spectrometry study of the adsorption of Sb on misoriented Si(111) 417 (1998) 107

Tribology

J. Kerssemakers and J.Th.M. De Hosson, Probing the interface potential in stick/slip friction by a lateral force modulation technique 417 (1998) 281

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M.A. Henderson, S.A. Joyce and J.R. Rustad, Interaction of water with the (1 × 1) and (2 × 1) surfaces of α-Fe_2O_3(012) 417 (1998) 66
M.A. van Daelen, M. Neurock and R.A. van Santen, Reactivity of diatomic molecules on Cu(100) 417 (1998) 247